PATEL, Surendra J.; YASTREBOVA, I.P. [translator]; STEPANOV, L.V., redaktor; IOVLEVA, N.A., tekhnicheskiy redaktor.

[Agricultural laborers in modern India and Pakistan. Translated from the English] Sel'skokhoziaistvennye rabochie v Indii i Pakistane. Perevod s angliiskogo I.P.IAstrebovoi. Predislovie G.G.Kotovskogo. Moskva, Izd-vo inostrannoi lit-ry, 1955. 197 p. (MLRA 9:5)
(India--Agricultural laborers) (Pakistan--Agricultural laborers)

YASTREBOVA, I.P.

Exhibit of school chemical apparatus. Khim. v shkole 10 no.6:76-77 N-D '55. (MLRA 9:1)
(Chemical apparatus)

DANTSIG, B.M., otv. red.; SHPIRT, A.Yu., otv. red.; YASTREBOVA, I.P., otv. red.; DIZHUR, I.M., red. izd-va; ZOTOVA, Yu.N., red. izd-va; YUREVICH, L.I., red. izd-va; BERESLAVSKAYA, L.Sh., tekhn. red.

[Economic conditions of Asian and African countries in 1959] Ekonomicheskoe polozhenie stran Azii i Afriki v 1959 g. Moskva, Izd-vo vostochnoi lit-ry, 1961. 509 p. (MIRA 14:9)

1. Akademiya nauk SSSR. Institut narodov Azii.
(Africa—Economic conditions) (Asia—Economic conditions)

FUKS, B.B.; YASTREBOVA, I.P.

Materials on the histochemistry of connective tissues in regeneration and transplantation. Vop. pat. i reg. org. krov. i dykh. no.1:141-151 '61. (MIRA 18:7)

POTEKHIN, I.I., glav. red.; BARANOV, A.N., red.; BELYAYEV, Ye.A., red.; GELLER, S.Yu., red.; GRAVE, L.I., st. nauchnyy red.; GRIGOR'YEV, A.A., red.; GUBER, A.A., red.; KULAGIN, G.D., red.; MALIK, Ya.A., red. MANCHKHA, P.I., red.; MILOVANOV, I.V., red.; NERSESOV, G.A., red.; OL'DEROGGE, D.A., red.; ORLOVA, A.S., red.; POPOV, K.M., red. ROZIN, M.S., kand. ekon. nauk, red.; SMIRNOV, S.R., red.; UFIMOV, I.S., red.; SHVEDOV, A.A., red.; YASTREBOVA, I.P., red.; PAVLOVA, T.I., tekhn. red.

[Africa; encyclopedia] Afrika; entsiklopedicheskii spravochnik. Glav. red. I.I.Potekhin. Chleny red. kollegii: A.N.Baranov i dr. Moskva, Vol.1. A - L. 1963. 474 p. (MIRA 16:4)

1. Sovetskaya entsiklopediya, Gosudarstvennoye nauchnoye izdatel'stvo, Moscow.
(Africa—Dictionaries and encyclopedias)

SVANIDZE, Ivan Aleksandrovich; YASTREBOVA, I.P., otv. red.; PAVLOV, A.G., red.; MIKHLINA, L.T., tekhn. red.

[Agriculture of Northern Rhodesia] Sel'skoe khoziaistvo Severnoi Rodezii. Moskva, Izd-vo vostochnoi lit-ry, 1963. 259 p. (MIRA 16:7)
(Rhodesia, Northern--Agriculture--Economic aspects)

YASTREBOVA-~~LIDOV~~ L. A.

"Investigation of the Physico-Technical Properties of Some Sediments in the Barents Sea", Trudy SOIN, No 9 (17) 1948 (113-139)

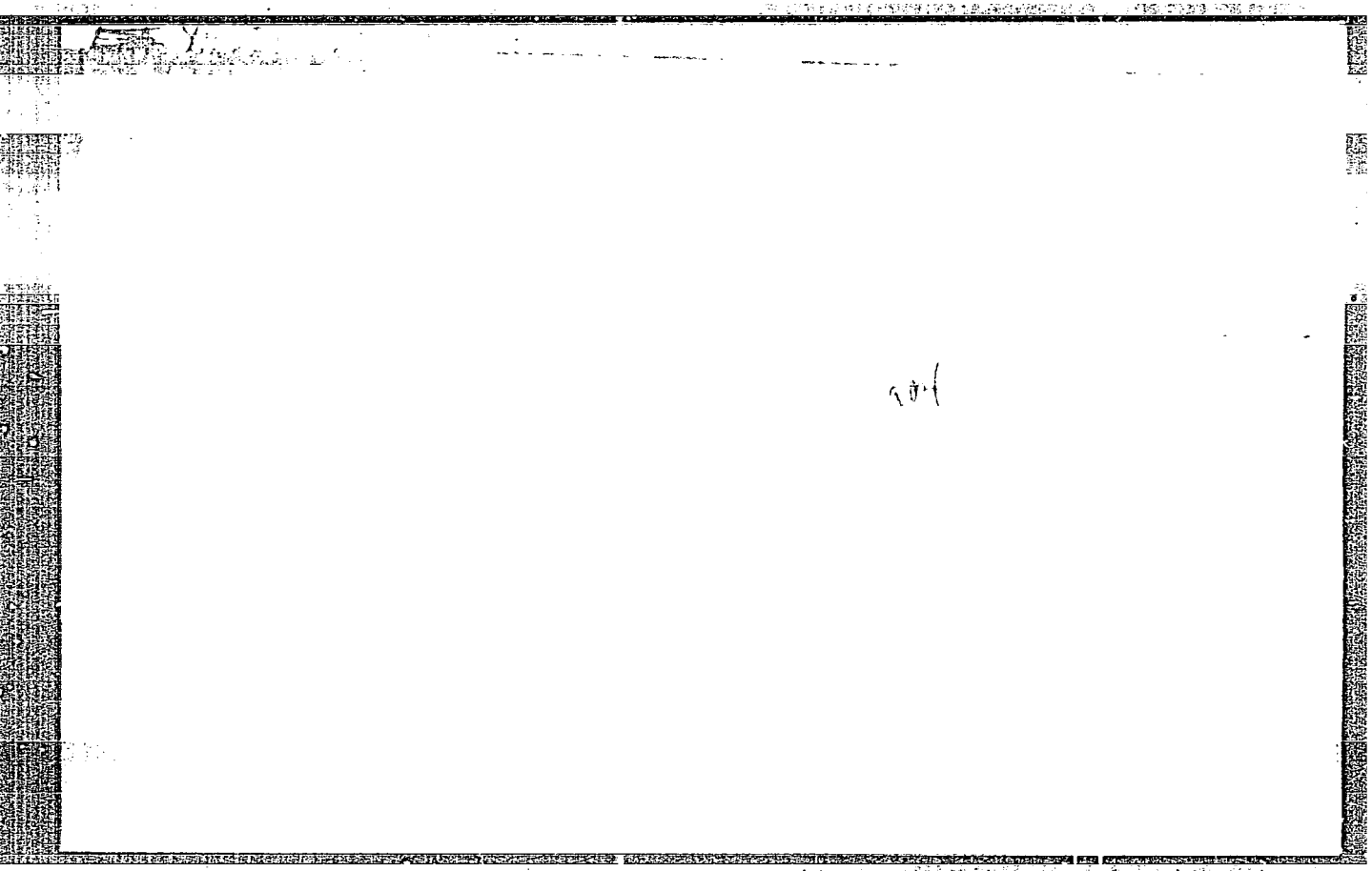
SO: U-3039, 11 Mar 1953

Yastrebova, L.A.

KLENOVA,M.V prof.;SOLOV'YEV,V.F.;ARTYUHOVA,N.M.;POPOV,P.G.; YASTREBOVA,L.A.; RATURIN,V.P.; KOPYLOVA,Ye.K.;TEODOROVICH,G.I., redaktor;TOPCHIYEV, A.V., akademik, redaktor; MIRONOV,S.I., akademik, redaktor;ALIYEV, M.M., redaktor; AKHMEDOV,G.A., redaktor; VARENTSOV,M.I., redaktor; DMITRIYEV,Ye.Ya., redaktor; DOLGOPOLOV,N.N., redaktor; IL'IN,A.A., redaktor; MEKHTIYEV,Sh.F., redaktor; MOZESON,D.L., redaktor; PUSTOVALOV,L.V., redaktor; FOMIN,A.V., redaktor; NOSOV,G.I., redaktor; KISELEVA,A.A., tekhnicheskiy redaktor

[Recent sediments of the Caspian Sea] Sovremennye osadki Kaspiiskogo moria; Moskva, Izd-vo Akademii nauk SSSR, 1956. 302 p. (MLRA 9:3)

1. Deystvitel'nyy chlen AN AzSSR (for Aliyev) 2. Chlen-korrespondent AN SSSR. (for Varentsov, Pustovalov) 3. Nachal'nik morskogo otryada Azerbaydzhanskoy neftyanoy ekspeditsii SOPS AN SSSR (for Klenova) (Caspian Sea)



SOV/78-3-12-27/36

AUTHORS: Ravich, M. I., Yastrebova, L. F.

TITLE: The Phase Equilibria in the System Na_3PO_4-Na_2SO_4-H_2O at 250° (Fazovyye ravnovesiya v sisteme Na_3PO_4-Na_2SO_4-H_2O pri 250°)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol 3, Nr 12, pp 2771-2780 (USSR)

ABSTRACT: The solubility of the system Na_3PO_4-Na_2SO_4-H_2O at 250° as well as the solid phase which forms at this temperature were investigated. Two phases with varying composition were found. The α-phase contained 24-45% Na_2SO_4, and the β-phase contained 0-15% Na_2SO_4. The α-phase is characterized by the refractive index, which varies with changes in composition from 1.480 (37% Na_2SO_4) to 1.489 (24% Na_2SO_4). The β-phase is anisotropic and is characterized by its refractive index, which also varies with the composition: N_p = 1.489 and N_g = 1.494 (at 15% Na_2SO_4) and N_p = 1.495 and N_g = 1.510 (in the absence of Na_2SO_4). The X-ray studies made show that the two phases belong to different crystal systems. From the radiographs it is apparent

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The Phase Equilibria in the System Na_3PO_4-Na_2SO_4-H_2O at 25°

that for the α-phase a change in composition leads to a conversion to Na_3PO_4. The thermograms of the α- and β-phases show thermal effects which correspond to the dehydration. In the dehydration the α-phase remains isotropic, although the refractive index decreases down to 1.460-1.471. In the dehydration of the β-phase (with more than 10% Na_2SO_4) this phase also becomes isotropic. The X-ray studies of the isotropic samples, prepared by dehydration of the α- and β-phases, are practically identical and do not differ from the X-ray pictures of the non-heated phase. In the crystallization of the α-phase no excess of alkali was found, but, on the contrary, with the crystallization of the β-phase Na_3PO_4, Na_2SO_4, and Na_2HPO_4 crystallized out simultaneously. With an increase in the Na_2SO_4 content the amount of Na_2HPO_4 in the solid phase becomes less and the alkalinity of the liquid phase decreases. With a Na_2SO_4 content of 14% the amount of Na_2HPO_4 present is zero. From the results obtained it follows that the sodium phosphate and the sodium sulfate form two double salts, the isotropic

The Phase Equilibria in the System Na_3PO_4-Na_2SO_4-H_2O at 250°

α-phase and the anisotropic β-phase.
There are 10 figures, 3 tables, and 9 references, 6 of which are Soviet.

SUBMITTED: November 20, 1957

5(2), 5(4)

AUTHORS: Ravich, M. I., Yastrebova, L. F. SOV/78-4-1-32/48

TITLE: On the Solid Phases Crystallizing in the Na_3PO_4-Na_2SO_4-H_2O System at High Temperatures (200-350°) (O tverdykh fazakh, kristallizuyushchikhsya v sisteme Na_3PO_4-Na_2SO_4-H_2O pri vysokikh temperaturakh (200-350°))

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 1, pp 169-181 (USSR)

ABSTRACT: The heterogeneous equilibrium in the Na_3PO_4-Na_2SO_4-H_2O system was investigated at 200, 300, and 350°. At 200° the solubility of Na_3PO_4 is higher than at room temperature. In this system the isotropic α phase and the anisotropic β phase crystallize at 200 and 250°. At 200° the β phase of approximately constant composition (14-15% Na_2SO_4) is an almost pure anisotropic double salt. The solid phases were investigated by crystallo-optical, radiographic, and thermographic analyses. At 200° there is no Na_2HPO_4 compound in the β phase. The results show that at temperatures higher than 210° the

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On the Solid Phases Crystallizing in the Na_3PO_4- SOV/78-4-1-32/48
-Na_2SO_4-H_2O System at High emperatures (200-350°)

anhydrous Na_3PO_4 salt is crystallized from aqueous solutions of Na_3PO_4. At temperatures lower than 210° the semihydrate $Na_3PO_4 \cdot 1/2H_2O$ crystallizes. The semihydrate does not form solid solutions with Na_2HPO_4. At 300°C the same solid phases crystallize as at 250°: Na_2SO_4, α and β phase. In the β phase the amount of Na_2HPO_4SO is reduced in the same way as at 250° with an increase in Na_2SO_4 content; and with 14-15 wt.% Na_2SO_4 there is no more Na_2HPO_4. The existence of the α and β phase in the Na_3PO_4-Na_2SO_4-H_2O system as balanced solid phases at 300° is caused by increased vapor pressure. At 350° the crystallization of a phase of variable composition containing sodium phosphate and sodium sulfate takes place, while alkalinity rises in the solid phase. In the temperature range from 300 to 350° a polymorphic transformation takes place in the neutral sodium orthophosphate with a change in the crystal

Card 2/3

On the Solid Phases Crystallized in the Na_3PO_4- SOV/78-4-1-32/48
-Na_2SO_4-H_2O System at High Temperatures (200-350°)

lattice. There are 6 figures, 8 tables, and 10 references, 4 of which are Soviet.

SUBMITTED: March 1, 1958

Card 3/3

YASTREBOVA, L. F.: Master Chem Sci (diss) -- "Phase equilibria and the nature of the solid phases in a system of trisubstituted sodium orthophosphate -- sodium sulfate -- water at high temperatures". Moscow, 1959, published by the Acad Sci USSR. 12 pp (Acad Sci USSR, Inst of Gen and Inorganic Chem im N. S. Kurnakov), 185 copies (KL, No 16, 1959, 106)

S/078/63/008/001/020/026
B124/B186

AUTHORS: Ravich, M. I., Yastrebova, L. F.

TITLE: Phase equilibria in the system LiCl - H_2O at high temperatures

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 8, no. 1, 1963, 202 - 207

TEXT: The solubility of lithium chloride in water over the temperature range 250 - 556°C was investigated and the water-vapor pressure above such solutions at high temperatures was determined. To measure the solubility, the curves p - x (pressure versus concentration at constant temperature) and, in certain cases, also the curves p - t were determined, the break corresponding to the transition from unsaturated to saturated solutions and allowing the determination of concentration and water-vapor pressure of the saturated solutions at various temperatures. A shaking autoclave was used for the experiments. With rising temperature the solubility of LiCl in water also rises and reaches 93.5% by weight at 556°C; this rise is continuous, so that at high enough temperatures the saturated solutions may be regarded as an anhydrous solution of the molten salt. This course ends at 606°C, the melting point of LiCl. The water-vapor pressure curve of the

Phase equilibria in the system...

saturated lithium chloride solutions is characterized by a maximum which lies at 45 kg/cm^2 and is much lower than that found for KCl (over 200 kg/cm^2) and NaCl (about 400 kg/cm^2). This is ascribed not only to the lower melting point of lithium chloride as compared to potassium and sodium chlorides but also to the hydrophilic properties of the lithium ion observed at high temperatures. There are 5 figures and 2 tables.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences USSR)

SUBMITTED: March 29, 1962

YASTREBOVA, L.F.; BORINA, A.F.; RAVICH, M.I.

Solubility of calcium molybdate and calcium tungstate in aqueous solutions of potassium and sodium chlorides at high temperatures. Zhur.neorg.khim. 8 no.1:208-217 Ja '63. (MIRA 16:5)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.Kurnakova AN SSSR.
(Calcium molybdate) (Calcium tungstate) (Alkali metal chlorides)

KIRPISHCHIKOVA, T.P.; YASTREBOVA, L.P.

Clinical studies on a new sulfonamide diuretic diacarb. Terap.arkh. 31 no.11:62-65 N '59. (MIRA 13:3)

1. Iz fakul'tetskoy terapevticheskoy kliniki (zaveduyushchiy - prof. B.P. Kushelevskiy) Sverdlovskogo meditsinskogo instituta.
(ACETAZOLAMIDE ther.)

YASTREBOVA, L.S.

Effect of the thermal treatment to which alkali silicate glasses were subjected on the structure of porcus glasses obtained from them. Zhur. prikl. khim. 36 no.8:1858-1860 Ag '63.
(MIRA 16:11)

YASTREBOVA, L.I., inzh.

New types of holders with a firm fit on the spindle.
Tekst.prom. 23 no.1:45 Ja '63. (MIRA 16:2)

1. Byuro tekhnicheskoy informatsii Ivanovskoy shpul'no-katushechnoy fabriki.

(Spinning machinery)

YASTREBOVA, L. N.

YASTREBOVA, L. N. -- "Investigation of the Physicochemical Processes of the Reaction of Earth With Asphalt." Sub 14 Nov 52, Moscow Order of Lenin State U imeni M. V. Lomonosov. (Dissertation for the Degree of Candidate in Geological and Mineralogical Sciences).

SO: Vechernaya Moskva January-December 1952

YASTREBOVA, L.N., kandidat geologo-mineralogicheskikh nauk.

Specifications of requirements and methods for evaluating soils treated with bitumen and tar emulsions. Avt. dor. 20 no.4:6-7 Ap '57. (MLRA 10:6)

(Road construction) (Bitumen)

BEZRUK, Vasiliy Makarovich, prof., doktor geol.-mineral.nauk; YASTREBOVA, Lidiya Nikolayevna, kand.geol.-mineral.nauk; LYUBIMOVA, Tamara Yul'yevna, kand.khim.nauk; VOLKOV, Anatoliy Valerianovich, kand. tekhn.nauk; ZUBKOVA, M.S., red.; NIKOLAYEVA, L.N., tekhn.red.

[Modern methods of building road bases and surfaces of soils stabilized by cement, lime, bitumen, and tar] Sovremennye metody stroitel'stva dorozhnykh osnovanii i pokrytii iz gruntov, ukreplennykh tsementom, izvest'iu, bitumom, degtem. Pod red. V.M.Bezruka. Moskva, Nauchno-tekhn.izd-vo M-va avtomobil'nogo transp. i shosseinykh dorog RSFSR, 1960. 200 p. (MIRA 14:4)

1. Gosudarstvennyy vsesoyuznyy dorozhnyy nauchno-issledovatel'skiy institut (for Bezruk, Yastrebova, Lyubimova, Volkov).
(Road materials) (Soil stabilization)

YASTREBOVA, L.N., kand.geolog-mineralogicheskikh nauk; LUKANINA, T.M., inzh.

Stabilizing soils by synthetic resins of high molecular weight. Avt. dor. 24 no.2:16-17 F '61. (MIRA 14:3)
(Soil stabilization) (Resins,Synthetic)

YAS'TREBOVA, L.N., kand.geol-mineral.nauk

Using bituminous emulsions and pastes in stabilizing soil. Avt. dor. 23 no.8:10-12 Ag '60. (MIRA 13:8)
(Soil stabilization) (Bituminous materials)

KOZLOVSKIY, B.K., inzh., red.; BEZRUK, V.M., doktor geol.-miner. nauk, prof., red.; YASTREBOVA, L.N., kand. geol.-miner. nauk, red.

[Instructions on using soils strengthened by binding materials in road and airport construction] Ukazaniia po primeneniiu v dorozhnom i aerodromnom stroitel'stve gruntov ukreplennykh viazhushchimi materialami (SN 25-64). Moskva, Stroiizdat, 1965. 142 p. (MIRA 18:7)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. Gosstroy SSSR (for Kozlovskiy). 3. Gosudarstvennyy vsesoyuznyy dorozhnyy nauchno-issledovatel'skiy institut (for Bezruk, Yastrebova).

KUSHELEVSKIY, B.P., prof.; YASTREBOVA, L.P.

Resistance to anticoagulants in the light of neurohumoral regulation of the coagulation and anticoagulation system of the blood. Kardiologiia 5 no.1:49-54 Ja-F '65.
(MIRA 18:9)

1. Fakul'tetskaya terapevticheskaya klinika (zav.- prof. B.P. Kuchelevskiy) Sverdlovskogo meditsinskogo instituta.

IVANOV, N.N., prof., red.; YASTREBOVA, M.N., otv. za vypusk.; GALAKTIONOVA, Ye.N., tekhn. red.

[Using saline soils and gravels mixed with tar and asphalt in constructing roadbeds and pavements] Ustroistvo dorozhnykh osnovanii i pokrytii iz zasolennykh gruntov i graviinykh materialov, obrabotannykh bitumami i degtiami; sbornik statei. Moskva, Nauchno-tekhn. izd-vo avtotransp. lit-ry, 1958. 207 p. (MIRA 11:12)

1. Moscow. Vsesoyuznyy dorozhnyy nauchno-issledovatel'skiy institut.
(Road construction)

VAVILIN, Kolya; TARTAKOVA, Valya, uchenitsa 8-go klassa; SOLOMKO, Lida, uchenitsa 8-go klassa; YASTREBOVA, Svetlana

Treasure chest of young naturalists' experience. IUn.nat. no.12:22-23 D '58. (MIRA 11:12)

1. Kozul'skaya srednyaya shkola, Kozul'skogo rayona Krasnoyarskogo kraya (for Vavilin) 2. Selo Sarykamyshka, Chulymskogo rayona Novosibirskoy oblasti (for Tartakova). 3. Ramonskaya srednyaya shkola, Berezovskogo rayona Voronezhskoy oblasti (for Solomko). 4. Shkola No.2 Stanitsy Grigoripolisskoy Stavropol'skogo kraya (for Yastrebova). (Nature study) (Agriculture)

YASTREBOVA, T. A.

Tat'yana Anatol'yevna
Yastrebova, T. A.

"Certain Morphological Aspects of the Form and Structure of the Surgical Portion of the Spinal Column Worthy of the Clinician's Attention." Min Health RSFSR. Saratov State Medical Inst. Saratov, 1955. (Dissertation for the Degree of Candidate in Medical Science)

+ Chr-of Normal Anatomy

So: Knizhnaya letopis', No. 27, 2 July 1955

KOZLOV, I.G. [deceased]; YASTREBOVA, T.A.; PURTOVA, S.I.; SEREBRYAKOVA, Z.D.; KIRINA, T.I., nauchnyy red.; CHIZHOV, A.A., vedushchiy red.; YASHCHURZHINSKAYA, A.B., tekhn.red.

[Key wells of the U.S.S.R.; Khanty-Mansi key well (Tyumen' Province)] Opornye skvazhiny SSSR; Khanty-Mansiiskaia opornaia skvazhina (Tiumenskaia oblast'). Leningrad, Gos.nauchno-tekhn.izd-vo neft.i gorno-toplivnoi lit-ry Leningr.otd-nie, 1961. 74 p. (Leningrad. Vsesoiuznyi neftianoi nauchno-issledovatel'skii geologorazvedochnyi institut, Trudy, no.176). (MIRA 15:4)
(Khanty-Mansi region--Petroleum geology)
(Khanty-Mansi region--Gas, Natural--Geology)

BOYARSKIKH, G.K.; NIKONOV, V.F.; PROKOPENKO, V.I.; ROVNINA, L.V.; ROMANOV, F.I.; YASTREBOVA, T.A.; SVERCHKOV, G.P., nauchnyy red.; NEVEL'SHTEYN, V.I., vedushchiy red.; YASHCHURZHINSKAYA, A.B., tekhn.red.

[Key wells of the U.S.S.R.;Berezovo key well (Tyumen' Province)] Berezovskaia opornaia skvazhina (Tiumenskaia oblast'). Leningrad Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, Leningr. otd-ie. 1962. 120 p. (Leningrad. Vsesoiuznyi neftianoi nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy, no.195)
(MIRA 15:12)

(Berezovo region (Tyumen' Province)--Geology)

[illegible], L. S.

"Protecting the Surface of Optical Glass From Chemical Deterioration From Moisture in the Air and Weakly Acidic Aqueous Solutions." Cand Tech Sci, State Optical Inst, Moscow, 1954. (RZhKhim, No 8, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

PHASE I BOOK EXPLOITATION 733

Yastrebova, L.S.

Zashchita silikatnykh opticheskikh stekol ot khimicheskogo razrusheniya (Protection of Optical Silica Glass From Chemical Damage) Moscow, Oborongiz, 1958. 108 p. 1,550 copies printed.

Ed.: Khozyainov, M.I., Engineer; Ed. of Publishing House: Morozova, P.B.; Tech. Ed.: Rozhin, V.P.; Managing Ed.: Zaymovskaya, A.S., Engineer.

PURPOSE: This book is intended for glass workers and for use in the optical industry and in laboratories where research is conducted in the physical chemistry of glass.

COVERAGE: The author discusses methods of increasing the chemical stability of optical silica glass. Present-day ideas on the basic types of glasses according to their chemistry are described. The author works out the theoretical basis for acid and paraffin protection of unstable silica glass. The main part of this book (chapters III, IV, and V) is devoted to the protection of silica glass surfaces. Chapter III is devoted to

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Protection of Optical Silica (Cont.)

explaining the conditions which offer optimum protection to optical flint glasses and crown glasses. Chapter IV is devoted to the structure of acid-paraffin protective coatings. Chapter V is devoted to the practical application of acid-paraffin protection. No personalities are mentioned. There are 95 references, of which 35 are Soviet, 33 English, 24 German, and 3 French.

TABLE OF CONTENTS:

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AVAILABLE: Library of Congress

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BK/ar
11-17-58

YASTREBOVA, L.S.; MOLCHANOV, V.S.

Effect of various factors on the structure of surface films of silicate glass. Zhur.prikl.khim. 31 no.11:1628-1636 N '58. (MIRA 12:2)

(Glass) (Films (Chemistry))

YASTREbovA, L. S.

15(2) SOV/72-59-5-1/23

AUTHOR: None Given

TITLE: Glass Science at the VIII Mendeleyev Congress (Nauka o stekle na VIII Mendeleyevskom s"yezde)

PERIODICAL: Steklo i keramika, 1959, Nr 5, pp 1-4 (USSR)

ABSTRACT: In the beginning a proclamation of the TsK KPSS to the personnel of the building material industries for a qualitative and quantitative increase of production is mentioned. The Congress took place in Moscow in the second half of March of the current year and was devoted to the 125th anniversary of the great scholar's birthday. Outstanding chemists of the Soviet Union and the People's Democracies attended the Congress. The principal problems of the development of chemistry were discussed at the plenary meetings and the meetings of the 18 Congress sections. Professor I. I. Kitaygorodskiy opened the meetings of the sub-section for glass and gave a survey of the stages of development of Soviet glass production as well as of a number of promising tasks in the field of glass technology. Moreover, the following lectures were held: Doctor Korani (People's Republic of Hungary) investigated the structure of the top-layers of glass;

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A. I. Avgustinnik (LTI imeni Lensovet) discussed the formation of a finely disperse crystalline phase from the glass-like phase; V. V. Vargin and G. O. Karapetyan (GOI) reported on absorption spectra, luminiscence, and photochemical properties of cerium-glass types; A. G. Vlasov (GOI) reported on the quantitative reciprocal relations between ordered and disordered glass phases; Ye. A. Poray-Koshits, Institut khimii silikatov AN SSSR (Institute of Silicate Chemistry of the AS USSR) discussed the reasons for the disagreement on the problem of the structure of glass-like substances; Professor O. K. Botvinkin, N. I. Ananich, and M. L. Mironova, Institut stekla (Glass Institute) reported on the Investigation of the Glass Structure by the Method of Thermal Analysis and Optical Polarization; Ye. V. Podushko (GOI) discussed the new method of electric glass melting and the melting of silicates by means of high-frequency current; Yu. G. Shteynberg reported on strontium-magnesium glazes without lead and boron for faience and majolica which have been developed in the Gosudarstvennyy nauchno-issledovatel'skiy keramicheskiy institut (State Scientific Research Institute of Ceramics); L. S. Yastrebova, and V. S. Molchanov (GOI) discussed the role played by the

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surface protection film in the destruction of silicate glasses; G. I. Veynberg (GOI) discussed the coloring characteristics and the technology of phosphate glasses; O. V. Mazurin (LTI) reported on the mobility of sodium ions in glass types of the system Na_2O-RO-SiO_2; Z. A. Nosova (NII Stroykeramika) discussed the process of subduing the glazes by lead oxide and zirconium; L. G. Mel'nichenko, Khar'kovskiy politekhnicheskiy institut (Khar'kov Polytechnic Institute) reported on silicate formation and sintering processes in the briquetted glass layer; K. M. Yevstrop'yev investigated various types of glass; N. N. Semenov (Glass Institute) reported on the determination of impurities in silica by spectroscopic analysis; G. S. Bogdanova, and Ye. M. Orlova (Glass Institute) reported on types of electrode glass which has been devised by them. Yu. V. Rogozhin (Glass Institute) discussed the kinetics of the formation of crystallization centers in photo-sensitive types of glass; Z. M. Syritskaya (Glass Institute) discussed the results of the investigation of the tendency of phosphatic systems towards glass formation; L. A. Grechanik, N. V. Petrovykh, and V. G. Karpechenko (NIIES) reported on the investigation of types of semiconducting oxide glass on the basis of V_2O_5; N. V. Solomin, L. A. Grechanik, I. V. Shpakova, and Ye. A. Faynberg (NIIES) discussed the production of conductive films on types of glass which contain components easily to be regenerated.

YASTREBOVA, L.S., POGODAYEV, A.K., DOBYCHIN, D.P.

Effect of the state of the glass surface on the porous structure of acid etching films on unstable glasses. Koll. zhur. 22 no.2:243-246 Mr-Ap '60. (MIRA 13:8)

1. Gosudarstvennyy opticheskiy institut im. S.I. Vavilova, Leningrad.
(Glass) (Films (Chemistry))

25399
S/080/61/034/002/021/025
A057/A129

AUTHOR: Yastrebova, L.S.

TITLE: On the most important factors determining the rate of chemical destruction of silicate glasses

PERIODICAL: Zhurnal Prikladnoy Khimii, v 34, no 2, 1961, 448-451

TEXT: In continuation of earlier investigations (Ref 1: V.S. Molchanov, Tr. GOI, 24, 145, 25 (1956), Ref 2: Tr. GOI, 24, 145, 172 (1956), Ref 3: ZhPKh, 31, 11, 1628 (1958)) the chemical resistance of glasses and of the porous structure of films formed on the glass surface were studied in four glass series (Tab.). These investigations demonstrated that the chief characteristic in chemical destruction of silicate glasses is the formation of a protecting film (hydrated silica). Corrosion tests on optical glasses showed that with decreasing silica content the total volume of pores in the surface film increases and chemical resistance of the

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On the most important factors ...

glass decreases. It was observed that the structure of the film depends also on the thermal pre-treatment and formation conditions of the film. In the present experiments in the first series of glasses (I in the table) the ratio between the soluble (Na_2O + BaO) and non-soluble (SiO_2) component was gradually changed. Glasses of the second series (II) differ in the content of alkali oxides and series III and IV in the nature of the multivalent cation. The experiments were carried out with freshly prepared glass powder (mean diameter of the grain 60 μ), i.e., on the surface of a fresh glass fracture in acetic acid solutions at equal pH and temperature. Chemical stability was estimated by the time T 1000 the necessary for the corrosion of a 1,000 Å thick surface layer. T 1000 was determined from curves "corrosion depth versus time". The latter were plotted by measuring the amount of dissolved Na_2O by titration or colorimetrically. Porosity of the surface film (1,000 Å) was estimated from water adsorption isotherms plotting the amount of adsorbed steam versus relative pressure of steam (p/ps)" diagrams. Results presented in Fig 1 demonstrate, according to former observations, that increasing content of soluble BaO increases porosity of the surface film and

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decreases thus the chemical stability of the glass. But experiments with glasses of the series II-IV showed that chemical stability depends not only on the structure of the surface film. Thus results in Fig 2 indicate a considerable difference in chemical resistance of glasses in spite of their similar isotherms, i.e., similar structure of the surface film. In Fig 4 (above) corrosion of glasses of the series IV in 0.1 N acetic acid and the corresponding isotherms (below) are demonstrated. Considerable difference in chemical resistance can be seen, as well as a correspondence in isotherms, i.e., structure of the surface films. An exception is the surface film of the A1/5 glass indicating a significant greater porosity than in other films, while chemical stability of this glass is much better than that of some other glasses of this series. The present author assumes that chemical resistance is determined (in the present cases) especially by the nature of the cation and by the structure of the surface film. Thus it could be stated that chemical resistance of silicate glasses depends on 2 factors: 1) the magnitude of bond energies between different cations in the glass structure, i.e., by the chemical nature of these cations and 2) the porosity of the film formed on the glass surface. Con-

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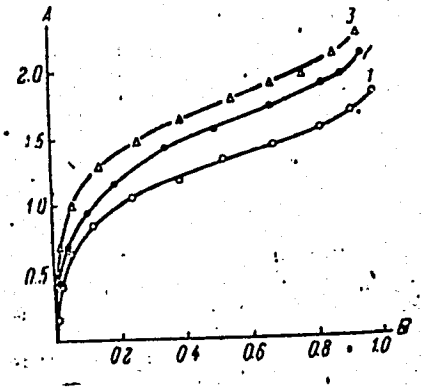
On the most important factors ...

cluding the author thanks K.S. Yevstrop'yev for this work being carried out in his laboratory, and V.S. Molchanov for supplying some glass samples and helping in some experiments. There are 4 figures, 1 table and 4 Soviet-bloc references.

SUBMITTED: March 25, 1960

Figure 1: Data on the porosity of films and chemical resistance of glasses of the series I

A - amount of steam adsorbed per 1 cm^3 of glass powder, B - relative steam pressure p/p_s, types of glass and time of corrosion T_{1000} in 0.01 N acetic acid solution at 25°C(hr):
1 - Ba/17 and 5.2, 2 - Ba/22 and 0.8,
3 - Ba/27 and 0.3



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YASTREBOVA, L.S.

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PHASE I BOOK EXPLOITATION SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye (Synthetic Zeolites: Production, Investigation, and Use). Moscow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady) Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor of Chemical-Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P. Golub'.

PURPOSE: This book is intended for scientists and engineers engaged in the production of synthetic zeolites (molecular sieves), and for chemists in general.

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Synthetic Zeolites: (Cont.)

SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

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Synthetic Zeolites: (Cont.) SOV/6246

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ZHDANOV, S. P.; YASTREBOVA, L. S. /

"On the structure of silicon-oxygen sceleton of alkaline-silicate glasses."

report submitted for 4th All-Union Conf on Structure of Glass, Leningrad, 16-21 Mar 64.

ACCESSION NR: AP4041791 S/0080/64/037/007/1442/1446

AUTHORS: Yastrebova, L. S.; Zhdanov, S. P.

TITLE: Investigation of the lixiviation products of highly siliceous alkali silicate glasses

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 7, 1964, 1442-1446

TOPIC TAGS: alkali silicate glass, structure, lixiviated alkali silicate glass, pore size, pore volume, sodium silicate glass, potassium silicate glass, dehydration, chemical stability, absorptive property, water adsorption, methanol adsorption

ABSTRACT: The structure of the lixiviation products of two and three component alkali silicate glasses of the composition SiO_2 87, R_2O 13 mol% (R = K or Na) was examined. Na/13, Na/11 + K/2, Na/3 + K/10 and K/13 glasses were leached with 1N HCl at 50C to form porous products comprised entirely of very fine pores which will adsorb water molecules but are too small for methanol molecules to penetrate. Curves for the dehydration of these glasses in air were drawn for temperatures from 20-800C. The lixiviation products of the potassium silicate glasses are much more porous

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ACCESSION NR: AP4041791

than those of the sodium silicate glasses; their pore volume and pore dimensions are greater. The potassium silicate glasses are less stable chemically; this property depends primarily on the structure of the porous layer formed by lixiviation, which in turn depends on the composition and structure of the initial glass. The obtained results are explained by the substitution of the alkali glass cations by the acid protons during lixiviation. Orig. art. has: 3 figures and 1 table

ASSOCIATION: None

SUBMITTED: 30Aug62

ENCL: 00

SUB CODE: MT

NR REF SOV: 005

OTHER: 001

Card 2/2

L 11867-66 EWT(m)/EWP(e)/EWP(b) GS/WH

ACC NR: AT6000478 SOURCE CODE: UR/0000/65/000/000/0122/0126

AUTHOR: Zhdanov, S. P.; Yastrebova, L. S.; Koromal'di, Ye. V.; Khvoshchev, S. S.

ORG: None

TITLE: Structure of the silicon-oxygen framework of alkali metal silicate glasses as determined by studies of products of their leaching

SOURCE: Vsesoyuznoye soveshchaniye po stekloobraznomu sostoyaniyu. 4th, Leningrad, 1964. Stekloobraznoye sostoyaniye (Vitreous state); trudy soveshchaniya, Leningrad, Izd-vo-Nauka, 1965, 122-126

TOPIC TAGS: silicate glass, glass property

ABSTRACT: Acid leaching of alkali metal silicate glasses has shown that porous glasses the pores of which are due to the removal of alkali metal cations are always formed. The existence of a definite relationship between the alkali metal oxide content in the initial glass and the volume and size of the pores indicates that Si-O-Si bonds are not broken or rearranged during the leaching. Disilicic acid is formed by a simple substitution of H^+ ions for Na^+ ions:

$$-\overset{|}{\underset{|}{Si}}- \overline{O}Na^+ + H^+ \rightarrow -\overset{|}{\underset{|}{Si}}- OH + Na^+$$

crystal solution crystal solution

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L 11867-66

ACC NR: AT6000478

the silicon-oxygen network remaining unaltered (as shown by x-ray diffraction spectra). The proposed scheme of the leaching process is consistent with the concept of their homogeneous structure. It is postulated that in inhomogeneous sodium silicate glasses with a low Na_2O content the regions of preferential localization of $-\overset{|}{\underset{|}{Si}}-O^-R^+$ bonds are not separated by silica interlayers but linked to one another, since such interlayers would block the leaching of such inhomogeneous glasses. Orig. art. has: 5 figures and 2 tables.

SUB CODE: 11, 07 / SUBM DATE: 22May65 / ORIG REF: 007

jw

Card 2/2

YASTREBOVA, T.K.

AUTHORS: Kondrat'yev, K. Ya. and Yastrebova, T. K. 49-6-19/21

TITLE: On the influence of the stratification on the thermal radiation of the atmosphere. (K voprosu o vliyanii stratifikatsii na teplovoye izlucheniye atmosfery).

PERIODICAL: "Izvestiya Akademii Nauk, Seriya Geofizicheskaya" (Bulletin of the Ac.Sc., Geophysics Series), 1957, No.6, pp. 831-833 (U.S.S.R.)

ABSTRACT: In practical calculations of the thermal radiation of the atmosphere the dependence of the thermal radiation on the vertical distribution of the temperature and the absolute humidity of the air are taken into consideration, assuming the atmosphere as being uniform in the horizontal direction (Kondrat'ev, K.Ya. Ref.1). However, it is important to take into consideration also the dependence of the intensity and the width of the absorption lines on the temperature and the pressure, particularly the dependence of the width of the lines on the pressure caused by the collisions between molecules (2). In the real atmosphere horizontal gradients of temperature and humidity will always be present and it is, therefore, important to evaluate to what extent neglecting the horizontal non-uniformity of the atmosphere may influence the results of calculation of the thermal

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On the influence of the stratification on the thermal radiation of the atmosphere. (Cont.)

radiation and it is to the elucidation of this problem that this paper is devoted. Attempts to calculate the changes in the counter-radiation and in the effective radiation caused by the horizontal non-uniformity in the atmosphere caused by various air masses have shown that these changes are so slight that they cannot be calculated by nomograms; this result is a consequence of the fact that stratification of the atmosphere at distances of the order of 10 to 20 km and more from a given point have no influence on the magnitude of the counter radiation and of the effective radiation calculated for that particular point; on a stretch of 10 to 20 km the temperature and the humidity changes relatively little. Only in the regions of the frontal zones where the horizontal temperature gradient reaches 1 C/10 km and the horizontal gradient of the specific humidity increases by 0.2 to 0.3 g/kg/10 km will there be an appreciable change in the counter-radiation and in the effective radiation caused by the horizontal non-uniformity of the atmosphere. However, even in such a case the relative changes do not exceed 0.5% for the counter-radiation and 1.5% for the effective radiation.

On the influence of the stratification on the thermal radiation of the atmosphere. (Cont.) 49-6-19/21

Thus, the model of the horizontal uniform atmosphere is fully satisfactory for the purpose of calculation of the counter radiation and the effective radiation.
There are 2 graphs and 4 Slavic references.

SUBMITTED: November 6, 1956.

ASSOCIATION: Leningrad State University imeni A. A. Zhdanov. (Leningradskiy Gosudarstvennyy Universitet im.A.A.Zhdanova).

AVAILABLE: Library of Congress

Card 3/3

S/531/62/000/129/004/004 D218/D308

AUTHORS: Pernyak, E. G., and Yastrebova, T. K.

TITLE: A study of the simplified heat balance method

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy. no. 129. 1962. Metody meteorologicheskikh nablyudeniy i obrabotki. 88-100

TEXT: The "simplified heat balance method" was used by V. V. Romanov (Trudy GGI, no. 54, 1956) to determine the evaporation from marshes. In this method, the evaporation is calculated for each hour of the day using data averaged over a decade. [Abstracter's note: 10 hours?] The total evaporation over this period is calculated from the heat balance equation

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A study of the....

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D218/D308

$$\overline{E} = 10 \sum_{1}^{24} \frac{R_b}{60 \left(1 + 0.64 \frac{\Delta t}{\Delta e}\right)} - \frac{\overline{Q}_s}{z_m} \qquad (1)$$

where E is the total evaporation per decade in millimeters, R_b is the radiation balance during the decade in cal/cm^2, Q_s is the total flow of heat into the soil per decade in cal/cm^2, Δt and Δe are the differences in the temperature and humidity at 0.5 and 2.0 m above ground level (averaged over a decade), and z_m is given by

$$z_m = \sum_{1}^{24} 60 \left(1 + 0.64 \frac{\Delta t}{\Delta e}\right) \Big/ 24 \qquad (2)$$

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A study of the...

S/531/62/000/129/004/004 D218/D308

The radiation balance R_b is obtained by calculation. Its short-wave component is determined by the method of A. P. Braslavskiy and Z. A. Vikulina (Gidrometeoizdat, 1954), while the long-wave part is determined with the aid of the nomograms given by Ye. D. Kovaleva and T. V. Kirillova (Trudy GGO, no. 27, (89), 1957). The heat flow into the soil is calculated from temperature data down to a depth of 80 cm and from the thermo-physical characteristics of the soil. The temperature and humidity gradients are obtained from thermograph and hygrograph recordings. Field measurements by the present authors have shown that the Romanov method of determining the evaporation can only be used if the calculated values of the radiation balance are replaced by observed values, and the number of gradient determination is not less than 6 per 24 hours. Since this re-moves the essential simplicity of the method, and, moreover, as it was possible to abandon the use of meteorological self-recording instrument without loss of accuracy, it is concluded

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A study of the... S/531/62/000/129/004/004
D218/D308

that the only useful modification of the existing network method of determining the heat flow will be to introduce the Romanov idea of calculating the decade sums with the aid of Eq. (1) from the decade averages of the temperature and humidity gradients, while the heat flow into the soil should be taken into account approximately in the form of a correction through the decade sum. There are 3 figures and 6 tables.

Card 4/4

LEBEDEVA, K.D.; SIVKOV, S.I.; YASTREBOVA, T.K.

More accurate measurements of the radiation balance by actinometric stations. Trudy GGO no.160:20-31 '64. (MIRA 17:9)

L 14180-66 EWT(1) GW

ACC NR: AT6004191 SOURCE CODE: UR/2531/65/000/174/0062/0080

AUTHOR: Lebedeva, K. D.; Sivkov, S. I.; Yastrebova, T. K.

28
B+1

ORG: Main Geophysical Observatory, Leningrad (Glavnaya geofizicheskaya observatoriya)

TITLE: Data from an investigation of thermoelectric radiation balance meters designed by Yu. D. Yanishevskiy

12,44,55

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 174, 1965. Metodika meteorologicheskikh nablyudeniy i obrabotki (Methods of meteorological observation and processing observation data), 62-80

TOPIC TAGS: radiation balance, actinometry, radiation receiver

ABSTRACT: A number of thermoelectric radiation balance meters designed by Yu. D. Yanishevskiy were tested in 1961-1963 at the Main Geophysical Observatory. The purpose of the investigation was to find systematic errors in meters of this type, to determine the effect of these errors on the accuracy of measurements of the radiation balance and to find ways to reduce these errors to a minimum. In this paper,

12,44,55

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L 14180-66

ACC NR: AT6004191

the authors analyze the data resulting from this study. The sensitivity of the instrument to short wave and long wave radiation is considered as well as the effect of differences in sensitivity on the result of measurements of the radiation balance. The differences in the sensitivity of the upper and lower sides of this type of radiation balance instrument are discussed. Recommendations are made for improving the accuracy of the meters. A coating with a minimum selectivity (Parsons lacquer) should be used for blacking. When the meters are checked at the central weather bureau, the sensitivity of the thermopiles to short wave and long wave radiation should be checked individually and so indicated on the verification certificate. The verification certificates for the meters should also show the sensitivity of each side separately. The correction factor which depends on the height of the sun should also be checked at the central weather bureau and indicated on the verification certificates for each side individually. In using the meters, observation should be taken on both sides and the average of these readings should be used for calculations. When taking readings, the maximum and minimum deflections of the galvanometer needle should be observed for a period of no less than one minute. The average of the maximum and minimum readings should be used for the radiation balance reading. In analyzing the data, scale corrections of less than one-half a division in galvanometer readings should not be taken into account. Orig. art. has: 7 figures, 5 tables, 16 formulas.

SUB CODE: 08/ SUBM DATE: 00/ ORIG REF: 006/ OTH REF: 002

Card 2/2

L 12817-66 EWT(1) GW

ACC NR: AT6004194 SOURCE CODE: UR/2531/65/000/174/0114/0123

AUTHOR: Lazovskiy, V. V.; Yastrebova, T. K.

ORG: Main Geophysical Observatory (Glavnaya geofizicheskaya observatoriya)

TITLE: On the possibility of using an electrolytic integrator in actinometry

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 174, 1965. Metodika meteorologicheskikh nablyudeniy i obrabotki (Methods of meteorological observation and processing observation data), 114-123

TOPIC TAGS: electrolytic integrator, zero point, electric polarization, absolute error, scale capacity, instrumental parameter, diurnal radiation sum, Gaussian distribution law

ABSTRACT: The electrolytic integrator described in another abstract was checked in laboratories of the Main Geophysical Observatory and the Department of the Physics of the Atmosphere at Leningrad State University and in field observations. Sources of probable errors could be the shifting of the zero point and a permanent electromotive force of polarization in the measuring electrodes. Absolute errors in measurements were computed for the current intensity, the resistance, and the scale capacity. All errors found were insignificant. The more important parameters of the instrument are the scale capacity and the coil resistance. The scale capacity is constant at currents of 1—40 μamp. The resistance is independent of the current

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L 12817-66

ACC NR: AT6004194

intensity and the temperature in the vicinity of the instrument. In a horizontal position the instrument is dependable, but in a vertical position a shifting of the zero point occurs. Examinations at laboratories proved that the parameters of the instrument did not change after field operations or transport over long distances. Integrators have been examined at four remote points in the USSR, Voyeykovo, Kiev, Sverdlovsk, and Tartu. Results obtained were compared with those obtained by control instruments. Diurnal sums of radiation obtained by integrators differed from those obtained by control instruments because of defects of the control instruments. Discrepancies were represented in the original article by graphs which approximated the Gaussian law of distribution. The more precise the control instrument was, the more the curve approached the Gaussian law. Electrolytic integrators can measure any radiation. Orig. art. has: 5 figures, 1 table, and 9 formulas.

[EG]

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 009/ ATD PRESS: 4183

jw

Card 2/2

L 08300-67 EWT(1) GW

ACC NR: AT6031971 (N) SOURCE CODE: UR/3199/66/000/015/0044/0049

AUTHOR: Barashkova, Ye. P.; Lebedeva, K. D.; Yastrebova, T. K.

21
B+1

ORG: none

TITLE: Comparison of long-wave radiation fluxes, measured by various instruments

SOURCE: AN SSSR. Mezduvedomstvennyy geofizicheskiy komitet. Meteorologicheskiye issledovaniya, no. 15, 1966, 44-49

TOPIC TAGS: long wave radiation, radiation flux, pyrgeometer, radiometer, pyrradiometer

ABSTRACT: The paper gives a brief description of measuring methods and of the results of comparing values of the radiation, fluxes, which are obtained by five different instruments in various climatic zones. When comparing the results of measuring, Angstrom's gyrogeometer is chosen as the basic instrument. It is shown that separate long-wave fluxes, measured by radiometers with the KRS-5 filter and with a germanium filter, are in better agreement with the fluxes, measured by the Angstrom's pyrgeometer, than those measured by the Falkenberg pygreometer. The long-wave balance, measured by a thermoelectric net pyrradiometer, is systematically underestimated as compared with that measured by the Angstrom's pyrgeometer, which is explained by the fact that the selectivity of the net pyrradiometer is not taken into

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L 06500-67

ACC NR: AT6031971

account in processing of its data. Some causes of divergence in the measurements of long-wave fluxes by different instruments are also analyzed. Orig. art. has: 3 tables and 4 formulas.

SUB CODE: 04/ SUBM DATE: none / ORIG REF: 008/ OTH REF: 001

Card 2/2 nst

L 08299-67 EWT(1) GW

ACC NR: AT6031969 (N) SOURCE CODE: UR/3199/66/000/015/0021/0030

AUTHOR: Lebedeva, K. D.; Sivkov, S. I.; Yastrebova, T. K. 27 26 B+1

ORG: none

TITLE: Short-period fluctuations in the readings of an unshielded balancemeter and pyrgeometer

SOURCE: AN SSSR. Mezhduvedomstvennyy geofizicheskiy komitet. Meteorologicheskiye issledovaniya, no. 15, 1966, 21-30

TOPIC TAGS: radiometer, balancemeter, short period fluctuation, lag time, net radiation measurement, pyrgeometer, METEOROLOGIC INSTRUMENT

ABSTRACT: The present study analyzes the short-period fluctuations in the readings of the unshielded balancemeter and pyrgeometer. Radiometers with sensitive surfaces without ventilation or transparent cups such as Yanishevsk's thermoelectric balancemeter used in the USSR, are greatly influenced by rapid changed in wind velocity and air temperature. Thus, the readings of such instruments fluctuate continually under natural conditions with periods of about 5—20 sec and amplitudes which depend on the lag-time of the instrument. These short-period reading fluctuations are not connected with the real variation of observed values and must be eliminated form the observation results.

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L 08299-67

ACC NR: AT6031969

This can be done by shielding sensitive surfaces with polyethylene films or by ventilation. Other ways are increasing the lag-time of instrument to an optimal value and improvement of the reading system. The lag-time increase from 10—15 sec to about 60 sec causes about a tenfold decrease of the short-period fluctuation amplitudes. At the same time the lag-time remains sufficiently little as the instrument is capable of responding to slower variations of the observed values with periods of 1 min or more. When observations are made with unmodified instruments, the fluctuations may also be eliminated by taking maximal and minimal readings of the index during a time interval of not less than 60 sec. The average of these two readings will be close to the mean value of the measured net radiation intensity (error of less than 5% in 92.5 cases). The possibility of eliminating the influence of the short-period fluctuations shows that unshielded and unventilated radiometers can be considered as suitable instruments for measuring net radiation. Orig. art. has: 4 figures.

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 014/ OTH REF: 002/

Card 2/2 nst

LEPKOV, L.P.; YASTREBOVA, V.E.; CHEKAREV, I.I.; MILINKOVICH, V.I.; SHILKINA, L.M.; AYBASHEVA, T.V., red.

[Manual of estimates and norms for the overhauling of buildings and structures in railroad transportation] Smetno-normativnyi spravochnik po kapital'nomu remontu zdanii i sooruzhenii zheleznodorozhnogo transporta. Moskva, Transport, Pt.2. Sec.2. 1965. 184 p. (MIRA 18:8)

1. Russia (1923- U.S.S.R.) Ministerstvo putey soobshcheniya. 2. Normativno-tekhnologicheskiy sektor Proyektno-konstruktorskogo byuro Glavnogo upravleniya elektrifikatsii i energeticheskogo khozyaystva Ministerstva putey soobshcheniya SSSR (for all except Aybasheva).

ARKHAROV, A.M.; YASTREBOVA, Ye.D.

Performance of graphite plates in a rotary blower[with summary in English]. Inzh.-fiz.zhur. no.12:85-89 ' 58. (MIRA 11:12)

1. Vysshaya tekhnicheskaya uchilishche imeni Baumana, g. Moskva.
(Graphite--Testing)

YASINETSKAYA, YE. N.

17 (2, 6) SOV/16-60-4-13/47

AUTHOR: Shwater, M.P., Lopatukhina, L.G., Sosunova, A.N. and Yastrebova, Ye.N.

TITLE: The Effects of Brucellosis Vaccination on the Course of the Infectious Process in Guinea Pigs Infected With Brucella Melitensis

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1960, Nr 4, pp 58 - 60 (USSR)

ABSTRACT: Experiments were performed to determine the effects of brucellosis vaccination on persons infected with brucellosis by extrapolating the results of vaccination of guinea pigs, experimentally infected with Br. melitensis. Vaccination of the infected animals 2 - 3 months after infection with Br. melitensis did not provoke chronic infection. No increase in the multiplication or spread of brucella could be noted in the animal's organs. The vaccinal strain probably reacted by stimulating the body's defensive mechanism, clearing the body more rapidly of Br. melitensis. It thus reacted similarly to vaccine therapy with killed brucella. It was difficult to achieve superinfection in animals infected with Br. melitensis by the administration of a vaccinal culture of low virulence; the vaccinal strain either refused to take or

Card 1/2

ASSOCIATION: Srednesaiatskiy protivochumnyy institut (Central Asian Anti-Plague Institute)

SUBMITTED: July 11, 1959

Card 2/2

SHMUTER, M.F.; LOPATUKHINA, L.G.; SOSUNOVA, A.N.; YASTREBOVA, Ye.N.

Effect of brucellosis vaccination on the course of infection in guinea pigs infected with Br. melitensis. Zhur. mikrobiol. epid. i immun. 31 no. 4:58-60 Ap '60. (MIRA 13:10)

1. Iz Sredneaziatskogo protivochumnogo instituta.
(BRUCELLOSIS)

S/016/60/000/06/03/051

AUTHORS: Shmuter, M.F., Lopatukhina, L.G., Sosunova, A.N. and Yastrebova, Ye.N.

TITLE: The Comparative Characteristics of Three Vaccinal Strains of Brucella (19-BA, 19 and M) in Experimental Subcutaneous and Skin Administration

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1960, No. 6, pp. 12 - 16

TEXT: At the proposal of the Ministerstvo zdravookhraneniya SSSR (Ministry of Health of the USSR), the authors studied the characteristics of the three vaccinal strains of Brucellus abortus (19-BA, 19 and M) used in the USSR for immunizing people against brucellosis. Gunea pigs were immunized subcutaneously or dermally with the strains, killed off after 1, 5, 15, 30, 45, 60, 90 or 180 days and studied for pathological lesions, the isolation of brucellae from various organs and for their immune response. Strain M had greater residual virulence than strains 19-BA and 19, caused more extensive pathological lesions and led to a greater spread of brucella through the organs and tissues. No essential difference was noted in the residual virulence of strains 19-BA and 19, since both caused identical lesions in the internal organs, affected the same tissues and caused the same immune

Card 1/2

S/016/60/000/06/03/051

The Comparative Characteristics of Three Vaccinal Strains of Brucella (19-BA, 19 and M) in Experimental Subcutaneous and Skin Administration

response. The immune response from the M strain lasted longer and was more intense than that caused by strains 19-BA and 19. All three strains were highly immunogenic. Dermal vaccination caused slightly less lesions and the same depth of immunity as subcutaneous immunization. Strain 19 is therefore to be recommended for vaccination ✓ purposes. If strain M is used, care must be taken in selecting the correct dosage in view of its greater residual virulence. There are 2 tables and 6 Soviet references.

ASSOCIATION: Sredneaziatskiy protivochumnyy institut (Central Asian Anti-plague Institute)

SUBMITTED: July 11, 1959

Card 2/2

a L 9791-66

ACC NR: AP5028533 SOURCE CODE: UR/0286/65/000/020/0126/0126

AUTHORS: Andreyev, L. A.; Kleshchenko, T. F.; Yastrebtsev, B. D.; Parilov, P.P.

ORG: none

TITLE: Machine for loading, transfer, and unloading of long loads. Class 63, No. 175828 /announced by Komi State Design and Scientific Research Institute of Forestry (Komi gosudarstvennyy proyektnyy i nauchno-issledovatel'skiy institut lesnoy promyshlennosti)/

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 126

TOPIC TAGS: automation equipment, transportation equipment, transportation equipment industry, material handling

ABSTRACT: This Author Certificate presents a machine for loading, transfer, and unloading of long loads, consisting of a self-powered chassis and an attachment containing a powered frame which can be rotated in the vertical plane and which has load-gripping arms (see Fig. 1). To permit changing the location of the rotating frame and to improve the stability during load transfer, power cylinders

Card 1/2 UDC: 634.0.377.1:621.868.238.6

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ACC NR: AP5028533

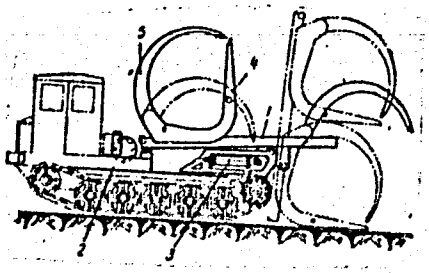

Fig. 1. 1 - Rotating frame; 2 - self-powered chassis; 3 - power cylinder; 4 - carriage; 5 - clamping arms.

are pivoted under the frame at the rear of the chassis. The piston rods of these cylinders are connected through pivots to the rotating frame. The load-gripping device consists of a carriage with a clamping arm. The carriage can translate along the rotating frame. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 30Jul64

Card 2/2

KAMENSKIY, Mikhail Aronovich; OFENGENDEN, Abram Mikhaylovich; POKRASS, Leonid Moiseyevich; YASTREBTSEV, Iosif Fedorovich

[Open-hearth furnace hearth bottom] Podina martenovskoi pechi. Moskva, Metallurgiia, 1965. 88 p. (MIRA 18:7)

YASTREBTSEV, V. N.

N/5
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1956

KOSOVANOV, Nikolay Yvacheslavovich

Mekhanizatsiya Ucheta Na Sudostroitel'nom Predpriyatii (mechanization of accounting in shipbuilding enterprises, by) N. V. Kosovanov i V. N. Yastrebtsev. Izd. 2. Moskva, Izd-vo "Rechnoy Transport", 1956.

126 P. Illus., Diagrs., Tables.

YASTREBTSEVA, T. N.

TA 75T34

USSR/Electronics
Oscillators, Transitron
Oscillations - Relaxation

May 1948

"Study of a Relaxation Oscillator of the Transitron Type," V. V. Migulin and T. N. Yastrebtsova, Sci Res Inst of Phys, Moscow State U, 12 pp

"Zhur Tekh Fiziki" Vol XVIII, No 5

Reports experimental study of transitron characteristics of 6Zh7 tube, and various performances of RS-oscillator working on this tube. Qualitative examination of processes in a similar system gives results in agreement with experiment. Submitted 24 Nov 1947.

75T34

YASTREBOVSKAYA, T. N.

"Investigation of the Processes of Jump Discountinuity in Relaxation Schemes." Sub 12 Sep 51, Moscow Order of Lenin State U imeni M. V. Lomonosov.
Candidate of Physico - Mathematical Sciences

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55..

USSR/Electronics - Radar and Navigation

FD-2676

Card 1/1 Pub. 90-8/12

Author : Yastrebtseva, T. N., and Galkin, O. P.

Title : A method of damping the natural oscillations of quartz

Periodical : Radiotekhnika, 10, 69-73, Jul 55

Abstract : The problem of damping quartz crystal oscillations arises from the necessity of obtaining exact calibration marks on radar range indicators, when radiated pulses lack strict periodicity. An experimental investigation is described of a rapid method of damping natural oscillations of quartz (Q of several tens of thousands and frequency 8×10^5 cps), by connecting the electrodes of the crystal to the input of a negative feedback circuit at the right time. In the experimental apparatus natural oscillations were shifted 180° and fed into the feedback channel (for which an amplification factor of 700 was chosen), producing full damping in less than 100 cycles. Diagram, oscillograms. One English reference.

Institution :

Submitted : June 26, 1954

YASTREBTSEVA, T.N.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1494
AUTHOR JASTREBCEVA,T.N., AKOPJAN,I.G.
TITLE The Investigation of the Impulse Excitation and Forcible Extinction of Quartz Oscillations.
PERIODICAL Radiotechnika, 11, fasc. 9, 39-45 (1956)
Issued: 10 / 1956 reviewed: 11 / 1956

Modern impulse technique makes use of installations which generate the electric time scale. Here the accuracy with which time is measured is determined by the stability of the generator of the scale graduations. Several works deal with the conservation of scale graduations by means of a quartz resonator. In view of the fact, however, that hitherto such works have been characterized by a number of defects, the present work is devoted to a theoretical and experimental examination of the impulse excitation of quartz oscillations as well as of some methods of forcible extinction. A complete solution for excited oscillations was found for the case in which a signal with rectangular impulse acts upon quartz. The optimum duration of the impulse, in the case of which the excited oscillations have the greatest amplitude and the lowest number of higher harmonics, is determined. Four methods of forcible extinction of quartz oscillations were investigated: a) furnishing quartz with an active shunt-resistance, b) extinction in a scheme with negative feedback coupling, c) extinction by means of an equilibrium scheme, d) impulse extinction. It was found that, with the help of the two first mentioned methods, the extinction of the quartz oscillations can be raised by only one order. Computations and experiments carried out by means of an equilibrium scheme have

YASTREBTSEVA, T.N.

Category : USSR / Radio Physics. Generation and Conversion of Radio-Frequency Oscillations I-4

Abs Jour : Ref Zhur - Fizika No 3, 1957, No 7271

Author : Yastrebtseva, T.N., Akopyan, I.G.
Title : Investigation of Shock Excitation and Forced Quenching of Quartz Oscillations.

Orig Pub : Radiotekhnika, 1956, 11, No 9, 39-45

Abstract : A theoretical and experimental investigation of shock excitation of quartz is described. A complete solution is obtained for excited oscillations in the case of a step signal and a rectangular pulse acting on the quartz. The optimum duration of the pulse under which the excited oscillations have maximum amplitude and a minimum of harmonics is established. Four methods of forced quenching of the quartz oscillations are investigated: shunting the quartz by an active resistance, quenching in a negative-feedback circuit, quenching with the aid of a balanced circuit, and shock quenching. It is established that the first two methods can increase the attenuation of the

Card : 1/2

Category : USSR / Radio Physics. Generation and Conversion of Radio-Frequency Oscillations I-4

Abs Jour : Ref Zhur - Fizika No 3, 1957, No 7271

quartz only by one order of magnitude. Calculations and experiments on quenching of quartz with the aid of the balanced circuit proposed in this article have shown that this method can increase the attenuation of the oscillations by a factor of 10^4. In addition, by a permanently connected feedback loop it is possible to reduce artificially the Q of the quartz to any required value. The balanced circuit developed for the excitation and quenching of quartz oscillations is suitable for practical use.

Card : 2/2

109-9-7/15

AUTHOR: Yastrebtseva, T.N.

TITLE: Analysis of a Bistable Multivibrator Employing Junction Transistors (Analiz spuskovoy skhemy na ploskostnykh poluprovodnikovykh triodakh)

PERIODICAL: Radiotekhnika i Elektronika, 1957, Vol.II, Nr 9, pp.1146 - 1156 (USSR)

ABSTRACT: The multivibrator considered is of the grounded emitter type (see Fig.1). Positive triggering pulses are applied through crystal diodes to the base electrodes of the transistors. First, the static analysis of the system is carried out. For this purpose the equivalent circuit of the multivibrator is as shown in Fig.2. Operating currents and voltages of the circuit are determined under the following assumptions: (1) the collector potential of a conducting transistor is very near to zero, (2) the base potential of a conducting transistor is very near to zero, (3) the initial emitter and collector currents of a nonconducting transistor are negligible, and (4) the collector and emitter resistances (r_k and $r_э$) are much higher than R_k, R_c and $R_б$. The

Card 1/2 meaning of the latter resist-

Analysis of a Bistable Multivibrator Employing Junction Transistors.

referring to Figs. 1 and 2. Analysis of the transient processes or changeover of the multivibrator is carried out by means of the equivalent circuit shown in Fig.4. The changeover from one stable state to the other, upon the application of an external trigger pulse, is investigated by splitting the processes into a number of stages. During the first stage a triggering pulse is applied to the base of the conducting transistor. During the second stage the nonconducting transistor is being gradually opened as a result of the feedback and the disappearance of the triggering pulse. Both transistors are conducting during this stage but one of them is being gradually closed while the other is being gradually opened. During the last stage the transistor which was previously conducting is fully closed. Analytical expressions describing the operation of the system in the first and the third stages are given (see Eqs.(13), (17) and (21)) and an equation for the rise time of the leading edge of the collector current pulse is found (see Eq.(22)). The above expressions are rather complicated but they can be employed in practical calculations. The theory was checked on a symmetrical multivibrator employing two Soviet type П6Б transistors and was found to give values for the rise times

Analysis of a Bistable Multivibrator Employing Junction Transistors.

which were accurate to within 20%. There are 10 figures, out of which there are 3 sets of oscillograms, and 2 non-Slavic references.

ASSOCIATION: Physics Faculty of the Moscow State University im. M.V. Lomonosov (Fizicheskiy Fakul'tet Moskovskogo Gosudarstvennogo Universiteta im. M.V.Lomonosova).

SUBMITTED: March 1, 1957.

AVAILABLE: Library of Congress.

Card 3/3

YASTREBTSEVA, T.N.

Investigating the process of the "jump" in self-oscillating relaxation circuits. Vest.Mosk.un.Ser.mat.,mekh., astron.,fiz., khim. 12 no.3:95-101 '57. (MIRA 11:3)

1.Kafedra kolebaniy Moskovskogo gosudarstvennogo universiteta.
(Oscillators, Electro-tube)

YASTREBTSEVA, T.N.

10 июня

(с 18 до 22 часов)

В. Н. Самойленко

Тепловые режимы полупроводниковых приборов

В. Н. Вертоградов

Исследование и расчет температурной зависимости параметров полупроводниковых триодов дрейфового типа

Ю. Р. Носов,
Б. Н. Хазанов

Осуществление температурной стабилизации усилителя напряжения на полупроводниковых триодах различных типов

М. А. Абдюханов

О зависимости параметров сплавных полупроводниковых триодов от тока эмиттера

В. Я. Павлова

Шумы в полупроводниковых усилителях

11 июня

(с 10 до 16 часов)

Г. Н. Берестовский

Статические характеристики и переходные процессы в полупроводниковом триоде при больших сигналах

Т. Н. Ястребцева,
Н. Н. Курносова

Исследование особенностей работы спусковой схемы на плоскостных полупроводниковых триодах при счетном запуске в зависимости от параметров триодов.

А. Ю. Гаранин

Расчет усилительного каскада на транзисторах.

В. А. Кузьмин

О влиянии режима насыщения в полупроводниковых триодах на работу импульсных схем

11 июня

(с 18 до 22 часов)

Ю. М. Азин,
К. Я. Сенаторов,
С. М. Чудинов

Об объемном заряде и электрическом поле в базовой области сплавного триода

К. С. Ржевкин

Влияние модуляции толщины базы на характеристики сплавного триода

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORIE), Moscow, 8-12 June. 1959

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001962230008-0"

BEMDRIKOV, G.A.; KRASNUSHKIN, P.Ye.; REYKHRUDEL', E.M.; POTEMKIN, V.V.; MUSTEL', Ye.R.; RZHEVKIN, K.S.; IVANOV, I.V.; KHAMLAMOV, A.A.; TIKHONOV, Yu.V.; STRELKOVA, L.P.; KAPTSOV, L.N.; ORDANOVICH, A.Ye.; KHOKHLOV, R.V.; VORONIN, E.S.; BERESTOVSKIY, G.N.; KRASNOPEVTSEV, Yu.V.; MINAKOVA, I.I.; YASTREBTSEVA, T.N.; SEMENOV, A.A.; VINOGRADOVA, M.B.; KARPEYEV, G.A.; DRACHEV, L.A.; TROFIMOVA, N.B.; SIZOV, V.P.; RZHEVKIN, S.N.; VELIZHANINA, K.A.; NESTEROV, V.S.; SPIVAK, G.V., red.; NOSYREVA, I.A., red.; GEORGIYEVA, G.I., tekhn. red.

[Special physics practicum] Spetsial'nyi fizicheskii praktikum. Moskva, Izd-vo Mosk.univ. Vol.1. [Radio physics and electronics] Radiofizika i elektronika. Sost. pod red. G.V.Spivaka. 1960. 600 p. (MIRA 13:6)

1. Professorsko-prepodavatel'skiy kollektiv fizicheskogo fakul'teta Moskovskogo universiteta im. M.V.Lomonosova (for all except Spivak, Nosyreva, Georgiyeva).
(Radio) (Electronics)

S/188/63/000/001/011/014
B164/B102

9.4310

AUTHORS: Kachukhashvili, G. S., Yastebtseva, T. N.

TITLE: Investigations on static and transient characteristics of current switches

PERIODICAL: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 1, 1963, 66 - 73

TEXT: A current switch circuit with surface alloyed semiconductor triodes is analyzed theoretically and the results are compared with those of experiments. Solving the diffusion equation for free carriers in the triode base taking account of boundary conditions and circuit equations gives analytical expressions for the volt-ampere characteristics, from which the minimum input pulse amplitude for switching and the input impedance can be obtained. Further the differential equation of the equivalent circuit is investigated taking account of the frequency properties of semiconductor triodes. This equation is solved under some simplifying assumptions. The dependence of the switching time on the triode and circuit parameters is investigated. The results of theoretical calculations are compared with experiments on a current switch circuit with low

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Investigations on static and... S/188/63/000/001/011/014
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frequency 6Ж5Б (P5B) triodes. Good agreement is obtained. There are 7 figures.

ASSOCIATION: Kafedra teorii kolebaniy (Department for Theory of Vibrations)

SUBMITTED: June 29, 1962

Card 2/2

ACCESSION NR: AP4043802 S/0188/64/000/004/0083/0086

AUTHOR: Andronov, Yu. A.; Anupy*l'd, A. Yu.; Yastrebtseva, T. N.; Gubankov, V. N.

TITLE: Oscillations in germanium samples with point contacts

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 4, 1964, 83-86

TOPIC TAGS: germanium, point contact, semiconductor

ABSTRACT: The authors present some preliminary results of an investigation of oscillations in n- and p-germanium with plane and point contacts when the samples are connected in a circuit of direct or pulsed voltage. Diagrams of the circuits used for determining oscillations and volt-ampere characteristics are shown in Fig. 1 of the Enclosure. The investigated samples of p-germanium had resistivities of 2, 5, 10 and 70 ohm·cm; the resistivities of the n-germanium were 1, 7, 18, 39 and 53 ohm·cm. The samples were rectangular blocks measuring 1.5 x 2 x 10 mm. In no case were oscillations observed in samples with plane contacts. The point contacts were made of wire of various metals and alloys. The ends of the wires were sharpened to a point electrolytically and had diameters of 5-100 μ. Contact of the metal point with the investigated germanium sample was accomplished using a micromanipulator. Nonlinearity of the volt-ampere characteristic was caused only by the point

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ACCESSION NR: AP4043802

contact. Typical volt-ampere curves of samples are shown in Figures 2 and 3 of the Enclosure. The curves 1 correspond to an increase in current through the point contact; curves 2 - to a decrease in the current to zero. On the direct branch of the curve for n-germanium, the segment with negative transconductance is missing. The direct branch of a sample of p-germanium has a segment with negative transconductance and the curve corresponding to an increase in direct current coincides in most cases with the curve corresponding to a decrease in the direct current to zero. In contrast to the results of earlier published studies, there was no evidence of a region of oscillations on the inverse branch of the volt-ampere curve of n-germanium in the region with negative transconductance; no oscillations were observed on the direct branch of the volt-ampere curve. In samples of p-germanium oscillations were observed only on the direct branch of the curve in the region with negative transconductance. The oscillations observed in samples of n-germanium are considerably more stable in frequency and in amplitude than the oscillations in samples of p-germanium. Among the metals used in the point contacts were Fe, Ni, W, W with Mo, W with Al, Cu, Al, Au with Ga and Pt. In all cases the volt-ampere curves had the shapes shown in Figures 2 and 3 and oscillations were observed in all cases. The frequency of oscillations in samples of n- and p-germanium varied, depending on the sample, from 0.1 to 1.5 mc/s. In most cases the frequency of oscillations in n-germanium was lower than in p-germanium. With a decrease in tem-

Card 2/6

ACCESSION NR: AP4043802

perature in p-type germanium the amplitude of the oscillations decreased, disappearing at a temperature of -150C. Orig. art. has: 3 figures.

ASSOCIATION: Kafedra fiziki kolebaniy Moskovskogo universiteta (Department of Vibration Physics, Moscow University)

SUBMITTED: 24Dec63 ENCL: 03

SUB CODE: EC NO REF SOV: 001 OTHER: 002

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ACCESSION NR: AP4043802

ENCLOSURE:01

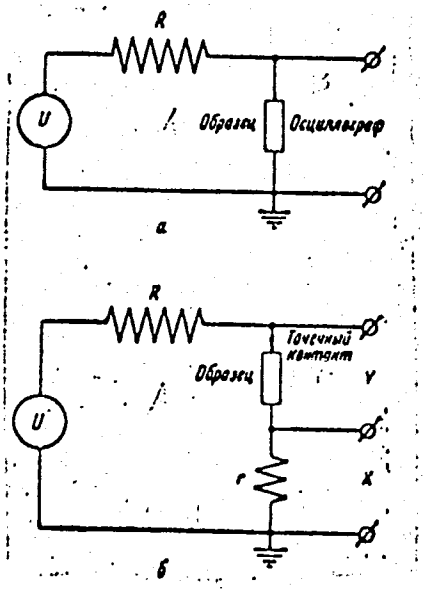

Fig. 1. A - sample; B - oscillograph; C - point contact.

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ACCESSION NR: AP4043802

ENCLOSURE: 02

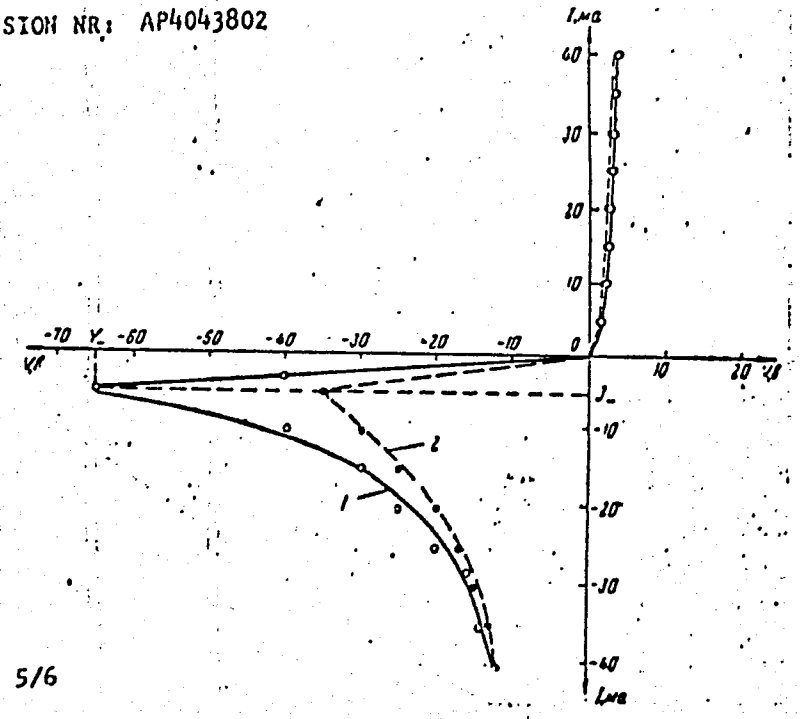

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Fig. 2.